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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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· protein search, using sw model OM protein

August 9, 2003, 16:24:23 ; Search time 15.5429 Seconds Run on:

(without alignments) 98.997 Million cell updates/sec

1 CRRAARAARRARAEA 16 US-09-905-691-5 16 Title: Perfect score: Sequence:

OLIGO Gapop 60.0 , Gapext 60.0 Scoring table:

Searched:

283308 seqs, 96168682 residues

0 Word size :

283308 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Listing first 45

PIR_76:* Database :

pira: *
pira: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	tatedta oldadora	probable mine prot		H-2 class I histoc	, Tab	ATP-dependent heli	conserved hypothet	probable ATP-bindi	hypothetical prote					8		L.A		a	HIND family secret	Ω	hypothetical prote		probable 3-hydroxy		conserved hypothet	qlycoprotein qx -		9	enoyl-CoA hydratas
COTANADO	QI	D86976	B70899	T50935	A21198	F83490	AD3479	T02808	T35745	AD2110	AH0925	T30752	D70777	C83305	D87638	AH3618	C39741	JE0233	E84295	F87364	T35868	A87649	872892	н82998	H87214	T36953	S35783	BVBRCE	A70744	A87474
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hypothetical prote	hypothetical prote	DNA repair protein	HHLF5 protein - hu	forked protein - f	hypothetical prote	80.7K alpha trans-	hypothetical prote			membrane antiden n	zinc finder protei	Tak-specific serie	hypothetical prote				
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B87258	A72586	B87495	OOBEDI	539885	T02558	TNBEB1	A87309	C95339	VGBEPS	OOBEI	T06699	S60762	T49093	T29066	P81055		ALIG
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	probable integration host factor [imported] - Mycobacterium	
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RESULT 1

20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 20-Apr-2001

Ricole, Str.; Eigimeler, K.; Parkhill, J.; James, K.D.; Thomson, N.R.; Wheeler, P.F. R.; Davies, R.M.; Devlin, K.; Duthoy, S.; Feltwell, T.; Fraser, A.; Hamlin, N.; Holseam, M.A.; Rutherford, K.M.
Nature 409, 1007-1011, 2001
A;Authors: Rutter, S.; Seeger, K.; Simon, S.; Simmonds, M.; Skelton, J.; Squares, F. A;Title: Massive gene decay in the leprosy bacillus.
A;Accession: D86976
A;A

A;Cross-references: GB:AL450380; NID:g13092744; PIDN:CAC30048.1; GSPDB:GN00147 C;Genetics: A;Gene: mihr

Gaps ö Length 105; 0; Indels Score 9; DB 2; Pred. No. 0.35; 0; Mismatches 56.2%; 5 Query Match
Best Local Similarity 100.
Matches 9; Conservative

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7 AAARRARAE 15 ð 셤

probable mIHF protein - Mycobacterium tuberculosis (strain H37RV)

C;Species: Woobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 20-Jun-2000
C;Accession: B70899
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gorc, Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroy Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Ttle: Deciphering the blology of Mycobacterium tuberculosis from the complete ge A;Reference number: A70500; MUID:98195987; PMID:9634130

A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA

A.Residues: 1-190 <COL> A.Cross-references: GB:280108; GB:AL123456; NID:g3256012; PIDN:CAB02193.1; PID:g154 A.Experimental source: strain H37Rv

A, Gene: mIHF C, Superfamily: Mycobacterium tuberculosis probable mIHF protein

9 19:18:31 2003

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C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002
C;Accession: AH0925
R;Parkhill, J.; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Churc, th, T.; Connerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.; Far, S.; Moule, S.; O'Gaora, P.
Nature 413, 848-852, 2001
A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, A;Authors: Parry, C.; Quail, M.; Rutherford, R.; Simmonds, M.; Skelton, J.; Stevens, A;Atcession: AH0925
A;Reference number: AB0502; MUID:21534947; PMID:11677608
A;Accession: AH0925
A;Stering : Preliminary
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Best Local Similarity 100.C
Matches 7; Conservative
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Matches 7; Conservative
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91 AAARRAR 97
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30 RRARAEA 36
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A; Residues: 1-110 <SEN>
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A; Residues: 1-77 <PAR>
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C; Species: Nostoc sp. PCC 7120
C; Species: Nostoc sp. PCC 7120
C; Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C; Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C; Accession: AD2110
R; Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriquchi Makazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S DNA Res. 8, 205-213, 2001
A; Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Analysis Parity.
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                                                                                                                                                                                                                                                                                                                   probable ArP-binding RNA helicase - Streptomyces coelicolor C; Species: Streptomyces coelicolor C; Species: Streptomyces coelicolor C; Species: Streptomyces coelicolor C; Date: 05-Nov-1999 #sequence_revision 05-Nov-1999 #text_change 05-Nov-1999 (S, Saunders, D.C.; Harris, D.; Bentley, S.D.; Parkhill, J.; Barrell, B.G.; Rajandream, Is Recession: T35745 (S, Saunders, D.C.; Harris, Angust 1999 A, Reference number: 221588 A, Status: preliminary; translated from GB/EMBL/DDBJ A, Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:AL109732; PIDN:CAB52056.1; GSPDB:GN00070; SCOEDB:SC7H2.14 A;Experimental source: strain A3(2) C;Genetics:
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100.0%; Pred. No. 14;
iive 0; Mismatches
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Pred. No. 12;
0; Mismatches
                                                                     DB 2;
                                                                     Score 8; DB 2; Pred. No. 13; 0; Mismatches
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100.0%;
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Best Local Similarity 100.
Matches 7; Conservative
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Matches 8; Conservative
                                                                                             Local Similarity 100.
                                                                                                                                                                                                           326 AAARRARA 333
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A; Residues: 1-69 < KUR>
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                       A; Map position: 1
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A; Gene: as12435
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Dypothetical protein Rv2232 - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 22-Oct-1999
C;Accession: D70777
C;Accession: D70777
C;Accession: D70777
C;Accession: D70777
C;Accession: D70777
C;Conor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamilin, N.; Holroy
Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.
Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.
A, Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A, Title: Deciphering the biology of Mycobacterium tuberculosis from the complete ge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Title: Genome sequence of a human tumorigenic poxvirus: Prediction of specific hos A;Reference number: 220876; MUID:96325459; PMID:8670425
A;Accession: T30752
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Accession: 130752
R;Senkevich, T.G.; Bugert, J.J.; Sisler, J.R.; Koonin, E.V.; Darai, G.; Moss, B.
Science 273, 813-816, 1996
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A;Cross-references: GB:AL513382; PIDN:CAD09426.1; PID:g16504543; GSPDB:GN00176 C;Genetics:
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A;Molecule type: DNA
A;Residues: 1-157 <COL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein 150R - Molluscum contagiosum virus 1
N;Alternate names: MC150R
C;Species: Molluscum contagiosum virus 1
C;Date: 05-Nov-1999 #sequence_revision 05-Nov-1999 #text_change 21-Jul-2000
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C;Superfamily: Molluscum contagiosum virus 1 hypothetical protein 150R
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100.0%; Pred. No. 17;
ative 0; Mismatches
                                                                                                                                                                          43.8%; Score 7; DB 2;
100.0%; Pred. No. 13;
:1ve 0; Mismatches
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C; Species: Leishmania major
C; Date: 24-Mar-1999 #sequence_revision 24-Mar-1999 #text_change 19-May-2000
C; Date: 24-Mar-1999 #sequence_revision 24-Mar-1999 #text_change 19-May-2000
C; Accession: D81457; T02808
R; Myler, P.J.; Audieman, L.; devos, T.; Hixson, G.; Kiser, P.; Lemley, C.; Magness, Proc. Natl. Acad. Sci. U.S.A. 96, 2902-2906, 1999
A; Title: Leishmania major Friedlin chromosome 1 has an unusual distribution of prote A; Reference number: A81455; MUID:99178987; PMID:10077609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       conserved hypothetical protein YPL199c, L2602.6 [imported] - Leishmania major (strai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Cross-references: GB: AE001274; NID: 93264850; PIDN: AAC24631.1; PID: 92995584; GSPDB A; Experimental source: strain MHOM/IL/81/Friedlin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Riccian, W.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; Ivanov Bazine M.; Goltsman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; Let Froc. Natl. Acad. Sci. O'S.A. 99, 443-448, 2002

Proc. Natl. Acad. Sci. O'S.A. 99, 443-448, 2002

A.ATitle: The genome sequence of the facultative intracellular pathogen Brucella melit A.Reference number: AD3252; PMID:11756688
                                                                                                           A; Fittle: Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pa A; Fittle: Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pa A; Fittle: Decision: F83490
A; Accession: F83490
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-383 <STO>
A; Residues: 1-383 <STO>
A; Residues: Lower (B; Molecule type: DNA)
A; Residues: Lower (B; Molecule type: DNA)
A; Residues: Lower (B; Molecule type: DN)
A; Cross-references: GB: AE004553; GB: AE004091; NID: G9947164; PIDN: AAG04626.1; GSPDB: GNA)
A; Experimental source: strain PAO1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATP-dependent helicase hrpB BMEI1818 [imported] - Brucella melitensis (strain 16M)
adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.;
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A;Gene: Phl237
C;Superfamily: multidrug resistance protein A; lipoyl/biotin-binding homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Species: Brucella melitensis
C; Species: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 14-Apr-2003
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C;Superfamily: HrpB type ATP-dependent RNA helicase
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100.0%; Pred. No. 11;
11ve 0; Mismatches
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i, Pred. No. 6.5;
0; Mismatches
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Best Local Similarity luv...
Best Local 8; Conservative
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A; Residues: 1-897 <PYL>
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A, Residues: 1-710 <KUR>
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                                                                                              .; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
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R;Lalanne, J.L.; Cochet, M.; Rummer, A.M.; Gachelin, G.; Kourilsky, P.
R;Lalanne, J.L.; Cochet, M.; Rummer, A.M.; Gachelin, G.; Kourilsky, P.
R;Lalanne, J.L.; Cochet, M.; Rummer, A.M.; Gachelin, G.; Rourilsky, P.
R;Lalanne, J.L.; Cochet, M.; Rummer, A.M.; Gachelin, G.; Part of a mouse class I gene is A;Reference number: A21198; MUID:84170268; PMID:6143316
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A)Cross-references: GB:K01182; NID:9199544; PIDN:AAA39653.1; PID:9387468
A:Note: the authors translated the codon CCC for residue 288 as Ser
C; Superfamily: class I histocompatibility antigen; immunoglobulin homology
F; 205-270/Domain: immunoglobulin homology <IMMO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-336 <MAR>
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A;Experimental source: strain BKME-9; Arcc700689
C;Genefics:
A;Gene: ditH
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                                                                                                                                                            56.2%; Score 9; DB 2;
100.0%; Pred. No. 0.56;
tive 0; Mismatches
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A, Molecule type: mRNA
A, Residues: 1-356 < LAL>
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les 9; Conserv
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Best Local S:
Matches 8:
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A; Gene: L2602.6

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R;Delvecchio, V.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; Ivar.; Mazur, M.; Goltaman, B.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; 1 Proc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002
A.;Title: The genome sequence of the facultative intracellular pathogen Brucella mel A;Reference number: AD3252; PMID:11756688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Map position: II
C;Superfamily: short-chain ATP-binding cassette proteins; ATP-binding cassette homd
                                                             igh-affinity brancheD-chain amino acid transport ATP-binding protein live BMEI108;
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                                                                                                        C.Species: Brucella melitensis
C.Date: 01-Feb-2002 *sequence_revision 01-Feb-2002 *text_change 17-May-2002
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Pred. No. 32;
0; Mismatches
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A;Experimental source: strain 16M
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Best Local Similarity 100.
Matches 7; Conservative
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A; Residues: 1-252 <KUR>
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Nature 406, 959-964, 2000
A.A.tile: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathor A.Feference number: A82950; MUID:20437337; PMID:10984043
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R;Nierman, W.C.; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J.
B;iLaub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolon
D;J: Ermolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M.
Proc. Natl. Acad. Sci. U.S.A. 98, 4136-4141, 2001
Proc. Natl. Acad. Sci. D.A. 99, Al36-4141, 2001
A: Fitle: Complete Genome Sequence of Caulobacter crescentus.
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A;Experimental source: strain PA01
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Species: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000 Accession: C83305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Species: Caulobacter crescentus | Species: 20-Apr-2001 #text_change 20-Apr-2001 | Species: 20-Apr-2001 | Species |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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                                                                                                                                                                                   Length 157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Reference number: A87249; MUID:21173698; PMID:11259647 A; Accession: D87638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43.8%; Score 7; DB 2;
                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 7;
Pred. No.
A; Experimental source: strain H37Rv C; Genetics: A; Gene: Rv2232
                                                                                                                                                                              Query Match
Best Local Similarity 100.
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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66 RAAARRA 72
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Best Local Similarity
Matches 7; Conserva
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Matches 7; Conserv
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A;Gene: PA2721
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